

## S1 An example of a case vignette from the prognostic test

### Case Vignette 1

Mrs Smith is a 44 year old woman. Two months ago she was diagnosed with metastatic adenocarcinoma from a probable lung primary (T4 N3 M1b). She received one cycle of chemotherapy with pemetrexed and cisplatin last month. Prior to being transferred to the hospice she had been admitted to St Mungo's District General Hospital with shortness of breath. She has a chest infection. Since her admission to the hospital she has refused any further palliative chemotherapy. She has a past medical history of chronic obstructive pulmonary disease.

Ten days ago she was transferred to St Swithin's hospice for terminal care. On admission her respiration rate was 18/min, her blood pressure was 101/66 mmHg, her temperature was 37.5 °C, and her O<sub>2</sub> saturation levels were 90% on room air. Her most recent observations, taken yesterday, can be seen below. On the day that you assess the patient her Palliative Performance Score is 60% and her Richmond Agitation and Sedation Score is 0. She is alert. She has noisy respiratory secretions due to her chest infection, occasional diarrhoea, and periods of extreme tiredness as well as occasional surges of energy. She is reporting mild pain which is controlled well with analgesics. She has no pressure sores. She is eating less due to a lack of appetite. Overall she is very pale and her skin is grey in colour. Mrs Smith is anxious but accepting of her death. The ward staff report that her general condition has been stable in the last 24 hours. She is not for cardio-pulmonary resuscitation. Recent blood tests results and her medication chart is available below.

Medication Name	Admission (Day 1)			Assessment (Day 10)		
	Dose	Route	Frequency	Dose	Route	Frequency
<b>Regular</b>						
Amoxicillin	500mg	PO	TDS	-	-	-
Cyclizine	50mg	PO	TDS	50mg	PO	TDS
Ibuprofen	400mg	PO	TDS	400mg	PO	TDS
Lansoprazole	15mg	PO	OD	15mg	PO	OD
Paracetamol	1g	PO	QDS	1g	PO	QDS
Dexamethasone	8mg	PO	OD	8mg	PO	OD
Folic Acid	400mcg	PO	OD	400mcg	PO	OD
Diazepam	2mg	PO	TDS	2mg	PO	TDS
Lorazepam	1mg	PO	OD	-	-	-
Oramorph	20mg	PO	QDS	-	-	-
Budesonide	-	-	-	1mg	NEB	BD
Lidocaine 5%	-	-	-	1 dose	TOP	BD
Docusate Sodium	-	-	-	200mg	PO	BD
Senna	-	-	-	2 tabs	PO	BD
Tazocin	-	-	-	4.6g	IV	TDS
Midazolam	10mg	PO	STAT	-	-	-
<b>PRN</b>						
Lorazepam	-	-	-	1mg	SL	2 / 24 hrs
Salbutamol	5mg x 2	NEB	2 / 24 hrs	2.5mg	NEB	1 / 24 hrs

Recent observations, taken yesterday:

Pulse 110bpm, blood pressure 117/79 mmHg, temperature 37.5 °C, and O<sub>2</sub> saturation 95% on 1L of oxygen.

Test	Admission (Day 1)	Most Recent (Day 9)		
	Results		Unit	Range
HB	86	62	g/L	130 to 180
PLATELET	69	1178	10 <sup>9</sup> /L	150 to 450
MCV	110		fL	80 to 97
NEUTROPHIL	5.1	27.1	10 <sup>9</sup> /L	1.7 to 8.0
Sodium	133		mmol/L	133 to 146
Potassium	5.2		mmol/L	3.5 to 5.3
Urea	3.8		mmol/L	2.5 to 7.8
Creatinine	44		umol/L	60 to 110
Bilirubin	77		umol/L	0 to 21
Alanine Transaminase	33		U/L	0 to 52
Alkaline Phosphase	973		U/L	30 to 130
Albumin	34		g/L	35 to 50
Phosphate	1.01		mmol/L	0.80 to 1.50
Adjusted Calcium	2.41		mmol/L	2.20 to 2.60
C Reactive Protein	56		mg/L	0.0 to 10.0

PPS Level	Ambulation	Activity & Evidence of Disease	Self-Care	Intake	Conscious Level
100%	Full	Normal activity & work No evidence of disease	Full	Normal	Full
90%	Full	Normal activity & work Some evidence of disease	Full	Normal	Full
80%	Full	Normal activity <i>with</i> Effort Some evidence of disease	Full	Normal or reduced	Full
70%	Reduced	Unable Normal Job/Work Significant disease	Full	Normal or reduced	Full
60%	Reduced	Unable hobby/house work Significant disease	Occasional assistance necessary	Normal or reduced	Full or Confusion
50%	Mainly Sit/Lie	Unable to do any work Extensive disease	Considerable assistance required	Normal or reduced	Full or Drowsy or Confusion
40%	Mainly in Bed	Unable to do most activity Extensive disease	Mainly assistance	Normal or reduced	Full or Drowsy +/- Confusion
30%	Totally Bed Bound	Unable to do any activity Extensive disease	Total Care	Normal or reduced	Full or Drowsy +/- Confusion
20%	Totally Bed Bound	Unable to do any activity Extensive disease	Total Care	Minimal to sips	Full or Drowsy +/- Confusion
10%	Totally Bed Bound	Unable to do any activity Extensive disease	Total Care	Mouth care only	Drowsy or Coma +/- Confusion
0%	Death	-	-	-	-

Richmond Agitation Sedation Scale (RASS)		
Please circle which category currently represents the patient		
+4	Combative	Overtly combative, violent, immediate danger to staff
+3	Very Agitated	Pulls or removes tube(s) or catheter(s); aggressive
+2	Agitated	Frequent non-purposeful movement, fights ventilator
+1	Restless	Anxious but movements not aggressive vigorous
0	Alert and Calm	
-1	Drowsy	Not fully alert, but has sustained awakening (eye-opening/eye contact) to voice (>10 seconds)
-2	Light Sedation	Briefly awakens with eye contact to voice (<10 seconds)
-3	Moderate Sedation	Movement or eye opening to voice (but no eye contact)
-4	Deep sedation	No response to voice, but movement or eye opening to physical stimulation
-5	Unarousable	No response to voice or physical stimulation